

DEPARTMENT OF THE ARMY  
U.S. ARMY MILITARY DISTRICT OF WASHINGTON  
FORT LESLEY J. McNAIR, DC 20319-5058

MDW Regulation  
No. 385-3

1 February 1999

Safety  
RISK MANAGEMENT


FOR THE COMMANDER:

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**History.** This regulation was last printed on 7 January 1998. This printing publishes a revision.

**Summary.** This regulation has been revised to update the policy, procedures, and responsibilities for the establishment and implementation of a Risk Management (RM) Program within the U.S. Army Military District of Washington (MDW). It further establishes the MDW Safety Director as the major Army command (MACOM) proponent and authority for the RM program, and prescribes MDW Form 32-R-E (Risk Assessment Worksheet) and MDW Form 41-R-E (revised) (Risk Management Worksheet).

**Applicability.** This regulation applies to staff principals, installations, subordinate commands, and activities of MDW. It also applies to tenant activities that are assigned to or supported by MDW.

**Supplementation.** This regulation may be supplemented at the installation level. Proposed supplements must be submitted for approval to Commander, MDW, ATTN: ANOS, 103 Third Avenue, Fort Lesley J. McNair, DC 20319-5058.

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\*This regulation supersedes MDW Reg 385-3, 7 January 1998.

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**Suggested improvements.** The proponent of this regulation is the MDW Safety and Occupational Health Director. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, MDW, ATTN: ANOS, 103 Third Avenue, Fort Lesley J. McNair, DC 20319-5058.

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## **Chapter 1**

### **Introduction**

#### **1-1. Purpose**

Risk management (RM) focuses on mission accomplishment while minimizing the potential effects of hazards that could cause loss of personnel and equipment and impact the mission. Commanders, leaders, and managers at all levels must integrate a safety awareness that facilitates realistic and safe training. This regulation provides guidance on the RM process and integrates a formal, written RM process into the planning and operational phase of all operations, missions, and training activities.

#### **1-2. References**

##### **a. Required references.**

(1) FM 100-14, Risk Management (available at website: <http://155.217.58.58/cgi-bin/atdl.dll/fm/100-14/default.htm>).

(2) Base Operations Risk Management Integration Handbook for Safety Professionals (available at website: <http://www.safety.army.mil/vso/vsodata/library/rmhandbook>).

##### **b. Related references.**

(1) AR 25-400-2, The Modern Army Recordkeeping System.

(2) AR 385-10, The Army Safety Program.

(3) FM 22-100, Military Leadership.

(4) FM 25-100, Training the Force.

(5) FM 25-101, Battle Focused Training.

(6) FM 100-5, Operations.

(7) FM 101-5, Staff Organization and Operations.

##### **c. Prescribed forms.**

(1) MDW Form 32-R-E (Risk Assessment Worksheet).

(2) MDW Form 41-R-E (Risk Management Worksheet).

#### **1-3. Explanation of abbreviations and terms**

Abbreviations and special terms used in this regulation are explained in the glossary.

## **Chapter 2**

### **Responsibilities**

**2-1. MDW Safety Director.** The MDW Safety and Occupational Health Director will provide overall policy guidance, coordination, and oversight of the RM program.

**2-2. MDW staff principals.** The Deputy Chief of Staff for Operations, Plans, and Security; Director of Ceremonies and Special Events; and the MDW Provost Marshal will ensure that RM guidance is incorporated into all operational, training, and mission published orders and plans.

**2-3. Commanders, leaders, and managers.** Commanders, leaders, and managers at all levels will--

- a. Integrate RM into all operations, missions, and training activities.

- b. Establish clear, feasible RM management policies and goals.

- c. Assess each mission and task in terms of its risk and continuously reassess risk as the mission and conditions change and experience is gained.

- d. Identify at least one person in the organization to attend the risk management train-the-trainer course and be certified to train others in the organization on risk management processes.

- e. Ensure all personnel are trained in RM concepts and the requirements of this regulation and FM 100-14.

- f. Provide the necessary assets to control risk.

- g. Use the Risk Management Assessment guideline sheet at appendix A to ensure that RM is integrated before, during, and after each operation, mission, and training activity.

- h. Ensure that the steps of the RM process are documented on the Risk Management Worksheet (MDW Form 41-R-E) and Risk Assessment Worksheet (MDW Form 32-R-E). An example of MDW Form 41-R-E is at appendix B.

(NOTE: This example is not comprehensive; the assessment itself would contain **all** identified hazards and controls). A blank copy of the MDW Form 41-R-E and MDW Form 32-R-E are at the end of this regulation. They may be reproduced on 8-1/2- by 11-inch paper and electronically generated.

- i. Maintain copies of all MDW Form 41-R-E and MDW Form 32-R-E in appropriate organizational files in accordance with AR 25-400-2.

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j. Ensure the MDW Form 41-R-E and HQ MDW Form 32-R-E are used as the basis for safety briefings of all involved personnel.

**2-4. Risk management trainers.** Risk management certified trainers will--

a. Attend a risk management train-the-trainer course for certification as a risk management trainer.

b. Train all others in their organization on risk management processes.

## **Chapter 3**

### **Risk Management**

#### **3-1. Philosophy**

Risk is managed by the same disciplined, organized, logical thought processes that govern all other aspects of military endeavors. The intent of RM is to increase operational efficiency and effectiveness by:

- a. Minimizing exposure of the force to risk.
- b. Executing missions with boldness through prudent risk taking.
- c. Improving operational readiness, planning, and communications.

#### **3-2. Principles**

The basic principles that provide a framework for implementing the RM process are:

- a. Integrating RM into mission planning, preparation, and execution.
- b. Making risk decisions at the appropriate level in the chain of command (see para 3-5 of this regulation).
- c. Accepting no unnecessary risk.

#### **3-3. Standards**

a. Leadership at the appropriate level of authority will make informed decisions to control hazards and manage or accept risks. Leaders are responsible and accountable for assessing their operation as a total system and ensuring that planning, risk management decisions, and execution proactively identifies hazards, assesses the associated risks, and identifies control measures necessary to reduce the risks to the level commensurate with their commander's intent.

b. The degree of risk determines the level of acceptance decision authority. When resources to control a high risk are not available, the risk issue must be elevated to the next higher command. This process continues until the information is presented to the level of command that has the resources and authority to eliminate the hazard or to control it to an acceptable level. In this manner, a conscious and informed decision is made to commit the resources to control the hazards or accept the risks. See paragraph 3-5 of this regulation for guidance on risk acceptance levels.

c. Risk is acceptable if mission benefits outweigh costs. Leaders must understand that risk taking is a decision making process that balances mission benefits and costs. Leaders must be prepared to take acceptable risks to accomplish the mission.

### **3-4. Integration**

a. The process of RM is a complete cycle that feeds back to its start point in a logical manner. A key consideration in managing risk is to match the process to the extent of the risk probability. If the risk is high, the process should be very complete and detailed. At lower levels of risk, the process may be abbreviated. Generally, all steps of the process should be retained with curtailment achieved by cutting back on the details of each step, not by eliminating a step.

b. There are five steps to the RM process.

(1) Identify hazards. The hazards are the potential sources of danger that could be encountered while performing a task or mission. Leaders must seek to identify all hazards associated with the operation or training. All aspects of current and future situations, the environment, and known historical problem areas should be considered. Special attention should be paid to identifying those hazards which have the potential to change such as weather, level of supervision, soldier alertness, terrain, equipment condition, etc.

(2) Assess hazards to determine risks. Identified hazards must be assessed to determine their cumulative effect on the operation. The impact of each hazard in terms of probability and severity should be examined to determine their risk level of one or more hazardous incidents that could result from exposure of the hazard. (See app C for the RM Matrix on probability, severity, and risk levels.)

(3) Develop controls and make risk decisions. Control measures must be developed to eliminate the hazard or reduce its risk. Leaders are expected to weigh the risk against the benefits of conducting training or performing an operation. Initial risk levels, controls, and residual risk levels should be considered when making a risk acceptance decision. As control measures are developed, risks will be reevaluated until all risks are reduced to a level where benefits outweigh potential costs. Risk decisions must be made at the appropriate level that corresponds with the degree of risk (see para 3-5 of this regulation).

(4) Implement controls. The controls established as a result of the first three steps are implemented in this step. Included is leader action to reduce or eliminate hazards. Specific controls will be integrated into plans, orders, standing operating

procedures (SOPs), training performance standards, and rehearsals. Knowledge of controls down to the individual soldier or employee is essential.

(5) Supervise and evaluate. Leaders will ensure that the controls implemented are executed by everyone. They will also conduct an evaluation of the RM process by following up during and after an action to ensure that it was executed according to plan, reevaluate the plan or make adjustments as required to accommodate unforeseen issues, and incorporating lessons learned for future use.

c. The RM process is applicable:

(1) During all missions: wartime and operations other than war.

(2) In all environments: tactical and administrative.

(3) In all operations: training and garrison.

(4) For all components of the force: Active, Reserve, civilian, industrial support, and family members.

(5) At all times: on and off duty.

### **3-5. Acceptance level**

The commander, leader, manager, or individual responsible for executing the mission or task:

a. Is authorized to accept moderate and low risk levels.

b. Will elevate high and extremely high risk decisions to the next level in the chain of command. (Note: A risk assessment of "extremely high" signals an urgent call for action. Identify at least a colonel (O-6) at the appropriate level in the chain of command to accept the risk of continuing the operation, approving modification(s), or halting the operation.)



## **Chapter 4**

### **Risk Management Assessment Forms**

#### **4-1. Risk Management Worksheet (MDW Form 41-R-E)**

a. This form (example at app B) will be completed during the planning phase of the operation, mission, or training activity by the leader(s) responsible for executing the mission or task.

b. Columns A-D are self-explanatory.

c. All tasks of the operation, mission, or training will be identified in column E.

d. All hazards identified will be noted in column F.

e. Each hazard will be analyzed, utilizing the Risk Assessment Matrix at appendix C, to determine the probability of its causing an accident and the most likely severity (effect) of the consequences should an accident occur (column G).

f. Controls will be keyed to each identified hazard and will address different levels of the hazard if appropriate (column H). For example, where heat is listed as a hazard, specific measures will be addressed for each heat category level as well as general requirements (i.e., taking wet bulb readings at the operation site rather than depending on readings taken at another site on the installation).

g. Each hazard will again be analyzed using the Risk Assessment Matrix at appendix C to determine the probability of causing an accident and the most likely degree of severity of the consequences should an accident occur. The matrix will be applied to the hazard after controls are implemented. The residual risk level of extremely high, high, medium, or low for each hazard will be noted in column I of the form. The residual overall risk for the operation will equal the highest residual risk identified in column I. (See para 3-5 of this regulation for risk acceptance levels.)

h. The manner for controls will be implemented and annotated in column J.

#### **4-2. Risk Assessment Worksheet (MDW Form 32-R-E)**

a. This form will be used by the leader(s) responsible for executing the mission or task as a daily checklist to evaluate conditions that may have changed since the RM Worksheet (MDW Form 41-R-E) was completed, to identify a new hazard that is not addressed on MDW Form 41-R-E, and to serve as a final check to ensure the safety of the operation, mission, or training activity. This form will be:

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(1) Completed immediately prior to the execution phase of the operation, mission, or training activity.

(2) Used in conjunction with the RM Worksheet (MDW Form 41-R-E).

b. The factors listed on this form represent key concerns that may affect the risk level of an operation between the planning and execution phases, or that may change from iteration to iteration for those operations, missions, or training activities of a repetitive nature.

### **4-3. General forms guidance**

a. For those operations, missions, or training activities that are conducted on a repetitive basis, there is no requirement to complete a new RM Worksheet (MDW Form 41-R-E) prior to each iteration. The initial RM Worksheet that was completed prior to the first iteration is sufficient unless changes have been made to the training scenario/operation plan that would affect the safety of personnel, equipment, or the environment, or new hazards are identified, via the Risk Assessment Worksheet (MDW Form 32-R-E), that are not on the current RM Worksheet.

b. When the risk level has been determined to be either "extremely high" or "high," everyone from the commander to the individual soldier or employee must be aware of the risk implication. All risks that can be controlled, will be controlled. By-the-book disciplines are mandatory. The risk level for the operation is the remaining assessment of risk after controls are in place. Approving authority for the risk will revert back to the initial risk level (see para 3-5 of this regulation).

**Appendix A**  
**Risk Management Assessment**

	<b>No Improve</b>	<b>Yes Sustain</b>
<b>BEFORE THE MISSION</b>		
1. Was a written safety risk assessment completed?	—	—
2. Were the most "probable" hazards identified for each type of operation?	—	—
3. Was probability of each hazard's occurrence/severity appropriately assessed?	—	—
4. Were control options identified to eliminate/reduce the hazards identified?	—	—
5. Was the decision to accept the mission risk made at appropriate command level?	—	—
6. Were identified hazards and controls clearly communicated to all personnel, especially those responsible for implementing controls?	—	—
<b>DURING THE MISSION</b>		
7. Were identified controls appropriately implemented and enforced?	—	—
<b>AFTER THE MISSION</b>		
8. Was the risk management process effective in identifying and controlling hazards actually experienced during the operation, mission, or training activity?	—	—

**Appendix B**  
**Sample MDW Form 41-R-E**

A. Mission or Task:		B. Date/Time Group Begin: End:		C. Date Prepared:	
D. Prepared By: (Rank, Last Name, Duty Position)					
E. Task	F. Identify Hazards	G. Assess Hazards	H. Develop Controls	I. Determine Residual Risk	J. Implement Controls ("How To")
Running in formation	Soldier struck by vehicle	High (H)	Present safety briefing to all personnel prior to operation.	Medium (M)	Unit SOP requirement
		High (H)	Post roadguards 50 meters to the front and rear of the formation	Medium (M)	Unit SOP requirement
		High (H)	Road guards and other personnel running in formations on roadways will wear reflective vests or reflective safety belts	Medium (M)	Unit SOP requirement
		High (H)	During period of low visibility (twilight, night, fog, etc.), all personnel will carry a flashlight.	Medium (M)	Modify training schedule
K. Determine overall mission/task risk level after controls are implemented (circle one) <div style="text-align: center; font-weight: bold; margin-top: 10px;">           LOW (L)    MODERATE (M)    HIGH (H)    EXTREMELY HIGH (E)         </div>					

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(NOTE: This example is not comprehensive. All other hazards that would pertain to this operation such as weather injuries and conditions, falls, animal bites, foot injuries, etc. would be identified and appropriate controls implemented.)

**Appendix C**  
**Risk Assessment Matrix**

<b>Severity</b>	<b>Probability</b>				
	Frequent	Likely	Occasional	Seldom	Unlikely
Catastrophic	E	E	H	H	M
Critical	E	H	H	M	L
Marginal	H	M	M	L	L
Negligible	M	L	L	L	L
E - Extremely High Risk      H - High Risk      M - Moderate Risk      L - Low Risk					

**Severity**

Catastrophic	Death or permanent total disability (accident risk). Loss of major or mission-critical system or equipment. Major property (facility) damage. Unacceptable collateral damage.
Critical	Permanent partial disability, temporary total disability exceeding 3 months time (accident risk). Extensive (major) damage to equipment or systems. Significant damage to property or the environment. Significant collateral damage.
Marginal	Minor damage to equipment or systems, property, or the environment. Lost day due to injury or illness not exceeding 3 months (accident risk). Minor damage to property or the environment.
Negligible	First aid or minor medical treatment (accident risk). Slight equipment or system damage, but fully functional and serviceable. Little or no property or environmental damage.

**Probability**

Frequent	Occurs very often in service life. Expected to occur several times over duration of specific mission. Always occurs.
Likely	Occurs several times in service life. Expected to occur during a specific mission. Occurs at a high rate, but experienced intermittently.
Occasional	Occurs some time in service life. May occur about as often as not during a specific mission or operation. Occurs sporadically (irregularly, sparsely, or sometimes).
Seldom	Occurs in service life, but only remotely possible. Not expected to occur during a specific mission or operation. Usually does not occur.
Unlikely	Occurrence not impossible, but can assume will almost never occur in service life. Can assume will not occur during a specific mission. Occurs very rarely, but not impossible.

**Risk Levels**

Extremely High	Loss of ability to accomplish the mission if hazards occur.
High	Significantly degrades mission capabilities in terms of required mission standards.
Moderate	Degrades mission capabilities in terms of required mission.
Low	Little or no impact on mission accomplishment.

## Glossary

### Section I

#### Abbreviations

AR	Army regulation
FM	field manual
HQDA	Headquarters, Department of the Army
MACOM	major Army command
MDW	U.S. Army Military District of Washington
OPLAN	operations plan
OPORDER	operations order
RM	risk management
SOP	standing operating procedure

### Section II

#### Terms

##### Condition

The status of personnel and equipment (readiness) as they interact with the operational environment during missing planning and execution.

##### Controls

Actions taken to eliminate hazards or reduce their risks.

##### Countermeasures

Actions taken to counteract danger, threat, or hazards.

##### Exposure

The frequency and length of time subjected to a hazard.

##### Hazard

Any real or potential condition that can cause injury, illness or death of personnel, damage to or loss of equipment and property, or mission degradation.

##### Probability

The likelihood that a hazardous incident will occur.

##### Residual risk

The level of risk remaining after controls have been identified and selected for hazards that may result in loss of combat power. Controls are identified and selected until residual risk is at an acceptable level or until it cannot be practically reduced any further.

**Risk**

Chance of hazard or bad consequences; the probability of exposure to chance of injury or loss from a hazard. Risk level is expressed in terms of hazard probability and severity (effect).

**Risk assessment**

A subjective evaluation of hazards. It is a conscious act by which the commander or leader evaluates all the factors affecting the mission and assists in determining actions that can help in eliminating, reducing, or minimizing risks while maximizing force protection.

**Risk decision**

The decision to accept or not accept the risk(s) associated with an action made by the commander, leader, or individual responsible for performing that action.

**Risk management**

A systematic process that assists commanders and leaders in making informed decisions in operations, missions, and training activities. It is the process of identifying, assessing, and controlling risks arising from operational factors and making decisions that balance risk losses with benefits. Properly implemented and enforced, the RM process promotes safer training without degrading realism, contributes to a successful operation, and improves overall mission effectiveness.

**Risk management integration**

The embedding of RM principles and practices into Army operations, culture, organizations, systems, and individual behavior. The five steps of the process are:

- o Identify the hazards
- o Assess the hazards
- o Develop controls and make a risk decision
- o Implement control
- o Supervise and evaluate

**Severity**

The expected consequence of an event (hazardous incident), in terms of degree of injury, property damage, or other mission impairing factors (loss of combat power, adverse publicity, etc.) that could occur.

**Unnecessary risk**

A risk which could be reduce or eliminated without hindering mission accomplishment

<b>A. Mission or Task:</b>		<b>B. Date/Time Group Begin: End:</b>		<b>C. Date Prepared:</b>	
<b>D. Prepared By:</b> (Rank, Last Name, Duty Position)					
<b>E. Task</b>	<b>F. Identify Hazards</b>	<b>G. Assess Hazards</b>	<b>H. Develop Controls</b>	<b>I. Determine Residual Risk</b>	<b>J. Implement Controls ("How To")</b>
<b>K. Determine overall mission/task risk level after controls are implemented (circle one)</b> <div> LOW (L)    MODERATE (M)    HIGH (H)    EXTREMELY HIGH (E) </div>					



RISK ASSESSMENT WORKSHEET MDW REGULATION 385-3				1. DATE	
2. OPERATION		3. UNIT		4. PREPARED BY	
FACTOR	RISK LEVEL				
	EXTREME	HIGH	MEDIUM	LOW	
5. PLANNING GUIDANCE	NONE	VAGUE	IMPLIED	SPECIFIC	
6. PREPARATION TIME	NONE	MINIMAL	ADEQUATE	EXTENSIVE	
7. TASK COMPLEXITY	EXTREME	MODERATE	ROUTINE	SIMPLE	
8. OPERATION DURATION	>24 HOURS	16-24 HOURS	8-15 HOURS	<8 HOURS	
9. TERRAIN	FLOOD CONDITIONS	MOUNTAIN, DESERT, JUNGLE, WATER	FLAT, ROLLING HILLS	CANTONMENT	
10. MEDICAL SUPPORT	NONE	FIRST AID TRAINED	COMBAT LIFESAVER	MEDICS	
11. TRAFFIC	EXTREMELY HEAVY	HEAVY	MODERATE	LIGHT	
12. PERSONNEL EXPERIENCE	<1 MONTH	1-6 MONTHS	7-18 MONTHS	>18 MONTHS	
13. HEAT	CATEGORY V	CATEGORY IV	CATEGORY II AND III	CATEGORY I OR LESS	
14. COLD	WIND CHILL <20	WIND CHILL 20-30	WIND CHILL 31-50	WIND CHILL >50	
15. SEVERE WEATHER	LIGHTENING/TORNADO	STORM WARNING	STORM WATCH, RAIN	CLEAR, CALM	
16. EQUIPMENT	POOR	MARGINAL	ADEQUATE	EXCELLENT	
17.					
18.					
19.					
20. TOTAL ITEMS CHECKED IN COLUMN					
21. POINTS PER ITEM CHECKED	4	3	2	1	
22. POINTS PER COLUMN (TOTAL CHECKED TIMES POINTS PER ITEM)					
23. POINTS FOR ENTIRE CHECKLIST (ADD POINTS PER COLUMN TOGETHER)					
24. EXTREME RISK: >45 POINTS	25. HIGH RISK: 32 - 45 POINTS	26. MEDIUM RISK: 16 - 31 POINTS	27. LOW RISK: <16 POINTS		

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NOTES: THIS WORKSHEET ADDRESSES MANY OF THE CONDITIONS WHICH MAY CHANGE BETWEEN THE PLANNING STAGE OF THE OPERATION/TRAINING, AND THE EXECUTION PHASE. IT IS BY NO MEANS COMPREHENSIVE AND OTHER FACTORS MAY BE REQUIRED TO BE ADDED TO THIS LIST. THIS WORKSHEET WILL BE COMPLETED BY THE COMMANDER, DIRECTOR, OR LEADER INVOLVED IN THE OPERATION/TRAINING. IT WILL BE UPDATED IF AND AS CONDITIONS CHANGE.

INSTRUCTIONS: PLACE A CHECK MARK IN THE APPROPRIATE COLUMN FOR EACH FACTOR. TOTAL THE CHECKS IN EACH COLUMN AND ENTER AT THE BOTTOM OF THE COLUMN. MULTIPLY THE TOTAL CHECKS TIMES THE POINT FACTOR FOR EACH COLUMN. ADD THE TOTAL POINTS FOR EACH COLUMN TOGETHER AND ENTER IN THE SPACE FOR POINTS FOR ENTIRE CHECKLIST. CHECK THE APPROPRIATE BOX IN LAST ROW OF CHECKLIST TO INDICATE THE OVERALL LEVEL OF RISK FOR THE OPERATION/TRAINING (EXTREME, HIGH, MEDIUM, OR LOW) AND REQUIRES THE APPROPRIATE RISK ACCEPTANCE LEVEL AUTHORIZATION.